

AMENDMENTS TO THE SPECIFICATION

Please enter the attached substitute specification, which incorporates the following changes (which reference paragraph numbers of the published version of the application):

Paragraph [0006] is amended as follows:

To face these exigencies several solutions have been proposed, which have patent ~~crowded~~ crowded the relevant technological field, not only because of the diversity of the demands but also because of the inadequacy and inexistence of a radical solution capable to satisfy at least the most urgent market needs.

Paragraph [0007] is amended as follows:

Just to fix the ideas it seems convenient to refer to the most ~~significants~~ significant inventions according ~~fr~~ e.g. to the U.S. Pat. No. 3,266,711, U.S. Pat. No. 4,487,945, U.S. Pat. No. 4,887,335, U.S. Pat. No. 4,926,526, U.S. Pat. No. 6,058,572 and to the European Patent Applications EP No. 0156779 and No. 0625949 B1 (corresponding to U.S. Pat. No. 5,598,608 and WO 93/16930).

Paragraph [0014] is amended as follows:

Nay the ~~fundamental~~ fundamental object of the invention is to provide a device so structured to accomplish not only one contemporaneous ensemble of functions but also to attain a maximum-maximorum of characteristics and performances, on the combination of which lay heavy not only the silence but also the technical prejudice of the Prior Art.

Between Paragraphs [0016] and [0017], the following heading is added:

BRIEF DESCRIPTION OF THE DRAWINGS

Paragraph [0019] is amended as follows:

FIGS. ~~3.1 and 3.2~~ 3A and 3B are schematic transversal cross-section views of M and F in ~~said positions~~ the open (1) respectively and closed (2) positions, respectively;

Paragraph [0020] is amended as follows:

FIGS. ~~4.1 4.2, 5.1 5.2, 6.1 6.3~~ 4A-4B, 5A-5B, and 6A-6B are schematic perspective views of the system of the invention in its configuration of the device ~~D.1 D1~~ open on bag C, respectively closed ~~D.2 D2~~, with the anti-tampering means LA open in position LA1 (FIG. ~~5.1 5A~~) respectively closed in position LA2 (FIG. ~~5.2 5B~~) and cut LA3 (FIG. ~~6.3 6A~~) with the consequent return to the initial open configuration D1 (FIG. ~~6.1 6B~~);

Paragraph [0021] is amended as follows:

FIGS. ~~7, 7', 8 and 8'~~ 7A-7B and 8A-8B are perspective views of clips inserted on-line on already closed bags, thus with ~~antitampering~~ anti-tampering tongue opened (FIG. ~~7 7A~~) and advantageously soldered (FIG. ~~7' 7B~~) at the end of the line (FIGS. ~~7 7A~~ and ~~7' 7B~~), respectively of clips for the heavy bags (~~f.i. e.g.~~ above 3 Kg) reinforced with a sleeve RS on female component F (FIGS. ~~8 8A~~ and ~~8' 8B~~);

Paragraph [0022] is amended as follows:

FIG. ~~7'' 7C~~ is a front view of said post-soldered tongues;

Paragraph [0023] is amended as follows:

FIG. ~~8'' 8C~~ is a cross-section view of the reinforcing sleeve RS on the female component F for heavy bags; and

Paragraph [0024] is amended as follows:

FIGS. ~~9, 9', 9'' and 10~~ 9A-9C and 10 are top view of systems apparatus to assembly on-line the clips and bags.

Between Paragraphs [0024] and [0025], the following heading is added:

DETAILED DESCRIPTION OF THE INVENTION

Paragraph [0025] is amended as follows:

In all the drawings the invention core, i.e. the multifunctional clip device D to repeatedly open-close, to tear cut, to signal tampering, movement, volumes to extract, conjunctions without snap-springs, on-line assembly etc, comprises the elements male M and female F in their various phases and positions of:--opening or uncoupling (1) (FIGS. 1, ~~3-1~~ 3A, and ~~5-1~~ 5A);--coupling or closure (2) (FIGS. 2, ~~3-2~~ 3B, and ~~5-2~~ 5B); --assembly on the container body C (FIGS. ~~4-1~~ 4A and ~~5-1~~ 5A); and--disassembly (3) (FIGS. ~~6-3~~ 6A and ~~6-1~~ 6B).

Paragraph [0026] is amended as follows:

Typically the male element M has an outer surface ME ~~fr.~~ e.g. semicylindrical (FIG. 1) or flat (FIG. ~~3-1~~ 3A) and an inner surface MI of the tongs jaws type consisting of two stiff portions 6, 6' separated by a pit or empty space V (~~fr.~~ e.g. in the shape of an ~~upset~~ inverted V).

Paragraph [0028] is amended as follows:

Preferably flanks 7, 7' are so chamfered to create an inviting funnel portion IF which facilitates the penetration of M within F (see FIGS. ~~3-1~~ 3A and ~~3-2~~ 3B). Typically at least one of said two flanks, e.g., flank 7, is provided at its top with a cut knurl 10.

Paragraph [0031] is amended as follows:

Also the structure (composition and ~~dimessions~~ dimensions) of tongues LM and LF is preferably different from that of the bodies or major portions of M and F as well as of A. Preferably said tongues will be ~~easely~~ easily bondable to each other and their union LA will be detached or cut, ~~f.i. e.g.~~ with the aid of scissors 15 (FIG. ~~6.3~~ 6A).

Paragraph [0034] is amended as follows:

The positioning of device ~~D-1~~ D1 (open) takes place as in FIG. ~~5.1~~ 5A namely by placing M and F each on a face of container C, in correspondence of the coupling IC (FIGS. ~~4.1~~ 4A and ~~5.1~~ 5A), in that disposition male element M is pushed (arrow Z of FIG. ~~3.1~~ 3A and arrows X of FIG. ~~4.1~~ 4A) against female element F taking thereby the pit V of M on horseback of protrusion RI of F as in FIG. ~~3.2~~ 3B and taking limb LE of the mouth of bag C from its erect position ~~LE-1~~ LE1 of FIG. ~~4.1~~ 4A to the fold position ~~LE-2~~ LE2 of FIG. ~~4.2~~ 4B. The uncoupling takes place as in FIGS. ~~6.3~~ 6A and ~~6.4~~ 6B. Starting from the configuration of FIG. ~~5.2~~ 5B the closed anti-tampering means ~~LA-2~~ LA2 is opened by detaching the tongues LM2 from LF2 (or ~~viceversa~~ vice-versa) or, more rapidly, by cutting with scissors 15 the coupled elements LM2-LF2. At this point limb LE2 is raised upwards (arrow G) taking it from the fold position of FIG. ~~4.2~~ 4B to the raised position of FIG. ~~6.4~~ 6B and a force is applied on device ~~D'-1~~ D1 in the direction of arrow P, so to detach the jaws 6-6' of MI from the protrusion RI of F.

Paragraph [0036] is amended as follows:

Advantageously a handle 9 is obtained on the outer surface of one of the two elements, preferably of the element which will take the more external disposition, ~~f.i.~~ e.g. on the back of female element F as in the FIGS. ~~3.1, 3.2~~ 3A and 3B.

Paragraph [0037] is amended as follows:

This handle acts as effective means to move or ~~desplace~~ displace container C which, even if fully loaded, will have such a weight to not disconnect the form- or joint-coupling of FIG. ~~3-2~~ 3B.

Paragraph [0039] is amended as follows:

Significantly the articulation means S (spring without ~~unexpteactable~~ unexpectedly loosing snaps) and the antitampering means LA are made from compounds of polyolefinic plastomers (PE, PP etc.) and of ~~not-negligeable~~ non-negligible amounts of elastomers so to have the desired elasticity and softness in contrast with the stiffness of the compound forming the major portions of M and F. The same applies to the inner surface of M and F. After all, differentiated compounds will be extruded in succession to form thus members M and F with relevant appendices A and LA, having also differentiated plastic-elastomeric ~~behaviour~~ behavior.

Paragraph [0041] is amended as follows:

FIGS. ~~7, 7' and 7''~~ 7A, 7B, and 7C show a clip D which is inserted on the closed mouth LA of a bag C, out or at the end of a fill and form line; the insertion and closure means being simply indicated in the form of pliers, sucker-pliers, robotizable arms (not represented) and the like.

Paragraph [0042] is amended as follows:

After the insertion (at the end of ~~f.i.~~ e.g. a form and filling line, FFL) and the closure (preferably with the aid of pliers) the closed mouth portion LA is folded downwards (90° degree rotation) and two soldering heads H-H' weld the tongues LF-LM in their horizontal superposed position of FIGS. ~~7' and 7''~~ 7B and 7C; The advantage is that the insertion and closure step of FIG. ~~7 f.i.~~ 7A, e.g. with the aid of any plier, the

downward folding of the bag mouth with the closed clip, and the welding of said lips LF-LM can be made at any moment, out of the ~~f.i.~~ e.g. FFL line, with portable means generally at the disposal of any user, even ~~f.i. housewives~~ e.g. housewives.

Paragraph [0043] is amended as follows:

In FIGS. 8, ~~8'~~ 8A and 8B is shown an improved clip to avoid easy unhooking or uncoupling. Indeed especially in the case of heavy bags, e.g., above three kilos, clips tend easily to uncouple and unhook. It has been found that by simply applying a reinforcing sleeve RS showing preferably a toothed grip TG, on at least a portion of the female F, this last element presses the male element M exerting thereby a strong coupling force avoiding any unexpected unhooking under a bag heavy load. Sleeve RS can be on a portion of the male element M and in correspondence thereof the female element F raised shoulders to receive the sleeve and compress it.

Paragraph [0044] is amended as follows:

FIGS. 9, ~~9', 9''~~ 9A, 9B, and 9C show an apparatus (fully- or semi-automated) to assembly clip D and bags. It comprises substantially a line with a conveyor belt 3' receiving, on one side, formed and filled bags 2' from a packaging unit 1' and, from an other side, clips D (on a suitable carrier) from the vibrating-screening basket 4' feeding clips to a descending channel 5' which, on its turn, feeds said clips to a device 10' comprising pneumatic pliers 6' that take said clips from the carrier, open them, insert and ~~bløk~~ block them on the bag heads.

Paragraph [0045] is amended as follows:

The movement of the bags 2' from the packaging unit 1' can be facilitated by an optional pusher 8'. The pliers 6' open the clip automatically on the first contact with the bag. Once the clips are inserted and fixedly blocked on the bag, a couple of sealing

embossers 7 is taken into contact with the bag head and welds the tongues or lips LF-LM (compare FIGS. ~~9^a and 9^b~~ 9B and 9C).

Paragraph [0048] is amended as follows:

Even if the invention has been described with reference to the embodiments shown in the accompanying drawings, same invention is ~~susettible~~ susceptible of all those modifications, substitutions, variants additions and the like which, being at the reach of a mean technician of this field, are to be considered included in the scope and in the spirit of the invention.